AMENDMENT TO THE CLAIMS

Kindly cancel claims 4, 9, and 15. Kindly amend claims 1, 5, 6, 10, 11, and 12 to read as follows.

1. (Currently Amended) A method of determining the prognosis [of creating a prognosis protocol] for a patient diagnosed with Alzheimer's disease (AD), neurofibromatosis, Huntington's disease, depression, amyotrophic lateral sclerosis, multiple sclerosis, stroke, Parkinson's disease, multiple infarcts dementia, a prion disease, a pathology of the developing nervous system, a pathology of the aging nervous system, an infection of the nervous system, a dietary deficiency, or a cardiovascular injury [a neurological disease], said method comprising,

a) identifying a patient already diagnosed with said disease;

b) determining the *apoE* allele load of said patient by genotyping or phenotyping, said phenotyping including characterizing ApoE protein isoform [; and

c) converting the data obtained from step b) into a prognosis protocol], wherein the presence of at least one *apoE4* allele or at least one ApoE4 protein isoform is indicative of a poor patient outcome [or decreased efficacy of a therapeutic].

2. (Cancelled)

3. (Previously Amended) The method of claim 1, wherein said method further comprises obtaining a patient profile.

4. (Cancelled)

5. (Currently Amended) The method of claim 1 [4], wherein said prion disease is Creutzfeldt-Jakob disease.

6. (Currently Amended) The method of claim 1 [4], wherein said dietary deficiency is a congenital defect in amino acid metabolism.

7. (Original) The method of claim 6, wherein the defect is selected for the group consisting of arginosuccinic aciduria, cystathionuria, histidinaemia, homocystinuria, hyperammonaemia, phenylketonuria, and tyrosinanaemia.

8. (Previously Amended) The method of claim 1, wherein said patient is diagnosed with fragile X syndrome.

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9. (Cancelled)

10. (Currently Amended) The method of claim 1 [9], wherein said disease is Alzheimer's disease.

11. (Currently Amended) The method of claim 3, wherein said method further comprises [patient profile includes] a determination of said patient's sex.

12. (Currently Amended) The method of claim 3, wherein said method further comprises a determination of [patient profile includes] the genotype of said patient.

13. (Original) The method of claim 12, wherein said genotype is the presenilin genotype.

14. (Original) The method of claim 12, wherein said genotype is the apolipoprotein C1 genotype.

15. (Cancelled)

16. (Cancelled)

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17-20 (Withdrawn)